

REMARKS

Favorable reconsideration and allowance of the present application are respectfully requested in view of the following remarks. Claims 9-16 are currently pending, wherein claims 9, 15, and 16 are independent.

§ 102 REJECTION - Bhattacharjya

Claims 9-12 and 14-16 stand finally rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 5,809,213 to Bhattacharjya ("Bhattacharjya"). Applicants respectfully traverse this rejection.

For a Section 102 rejection to be proper, the cited reference must teach or suggest each and every claimed element. *See M.P.E.P. 2131; M.P.E.P. 706.02*. Thus, if the cited reference fails to teach or suggest one or more elements, then the rejection is improper and must be withdrawn.

In this instance, claims 9-12 and 14-16 are not anticipated by Bhattacharjya because Bhattacharjya fails to disclose each and every claimed element as discussed below.

Independent claim 9 defines a color management apparatus for converting supplied image data using a lookup table of color characteristic data into output image data. The color management apparatus includes, *inter alia*, a lookup table composed of *characteristic points* which are points indicating the relationship between supplied image data and output image data *which are determined to be impossible to be interpolated when a process for converting image data is performed*; and image data converting means for converting supplied image data into output image data using said lookup table composed of the characteristic points.

As previously submitted, Bhattacharjya discloses a method and apparatus for automatic color correction. According to Bhattacharjya a nonlinear interpolation technique is applied to a relatively small number of measured sample values generated from color image patches to provide a color lookup table having a larger number of calibration values stored therein. The nonlinear interpolation technique produces a number of augmented sample values by interpolating between measured sample points and subsequently resampling the resulting approximation at a resolution greater than that used to generate the measured sample points. See, for example, Fig. 2A and column 10, lines 47-63 of Bhattacharjya.

In rejecting claim 9, the Examiner asserts that the augment sample points of Bhattacharjya are equivalent to the claimed characteristic points. To support this assertion, the Examiner points to Fig. 2A and column 10, lines 40-63 of Bhattacharjya. This assertion is unfounded for the following reason. Particularly, **the Examiner now points to col. 10, lines 29-46 as disclosing** “a lookup table composed of **characteristic points** which are points indicating the relationship between supplied image data and output image data which are determined to be **impossible to be interpolated** when a process for converting image data is performed.” In supporting such assertion, the Examiner alleges that the above-identified portion of Bhattacharjya discloses “. . . points that are **either impossible to be interpolated**, or at the very least **impossible to be linearly interpolated**.” (*See Final Office Action, page 2, section 2.*)

Applicants respectfully submit that the Examiner’s assertion that Bhattacharjya discloses augmented sample points that are either impossible to be interpolated, or at the very least impossible to be linearly interpolated is totally unfounded. First, Applicants respectfully submit that Bhattacharjya fails to disclose that augmented sample points are impossible to be

interpolated since Bhattacharjya clearly discloses that the augmented sample points are generated by using interpolation (e.g., nonlinear) methods (see col. 10, lines 54-57). Second, Bhattacharjya clearly discloses in col. 10, lines 6-10 that a linear interpolator is used in conjunction with a LUT which is constructed by using a nonlinear interpolation based scheme. Thus, if the sample pointes were impossible to be linearly interpolated, as alleged by the Examiner, Bhattacharjya would not suggest using a linear interpolator. Further, at col. 9, lines 60-67, Bhattacharjya discloses as follows:

For relatively smooth functions, nonlinear interpolation methods generally provide better accuracy with fewer sample points than liner interpolation methods. Nonlinear interpolation methods, however, are computationally expensive. Thus, in accordance with the present invention, a relatively small number of measured sample points are generated and a nonlinear interpolation method is used to compute an approximation to the function f_c .

Thus, merely providing better accuracy by using nonlinear interpolation methods does not necessarily mean that the sample points are impossible to be linearly interpolated as alleged by the Examiner.

As previously submitted, Bhattacharjya merely discloses a method of applying a nonlinear interpolation technique to a relatively small number of measured sample values generated from color image patches to provide a color lookup table having a larger number of calibration values stored therein. Applicants again respectfully submit that the mere fact that one or more of the augmented sample points may, *arguendo*, be a characteristic point as claimed is not equivalent to disclosing that the lookup table contains *only* characteristic points. The augmented sample points 74a-74k as illustrated in Fig. 2A clearly include noncharacteristic

points. Therefore, a lookup table composed of characteristic points does not necessarily flow from the disclosure of Bhattacharjya. Accordingly, Bhattacharjya does not anticipate independent claim 9.

Claims 10-12 and 14 variously depend from independent claim 9. Therefore, claims 10-12 and 14 are patentable over Bhattacharjya for at least those reasons presented above with respect to claim 9.

Independent claim 15 defines an image converting apparatus. The apparatus includes, *inter alia*, a color management means which uses a lookup table composed to *characteristic points* which are points indicating the relationship between supplied image data and output image data *which are determined to be impossible to be interpolated* when said image data converting means performs an image data converting process. In addition, independent claim 16 defines a color correction method that includes, *inter alia*, performing a table development process such that a lookup table composed to *characteristic points* is developed into a multidimensional lookup table. Accordingly, claims 15 and 16 are patentable over Bhattacharjya because Bhattacharjya fails to disclose a lookup table composed of characteristic points as claimed. (See discussion above with respect to claim 9.) Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 9-12 and 14-16 under 35 U.S.C. § 102(e).

§ 103 REJECTION - Bhattacharjya

Claim 13 stand finally rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Bhattacharjya. Applicants respectfully traverse this rejection.

In order to support a rejection under 35 U.S.C. § 103, the Examiner must establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness three criteria must be met. First, there must be some motivation to modify the cited reference. Second, there must be a reasonable expectation of success. Finally, the modification must teach each and every claimed element. In the present case, claim 13 is not rendered unpatentable over Bhattacharjya because the Examiner fails to establish a *prima facie* case obviousness as discussed below.

In rejecting claim 13, the Examiner takes Official Notice that "compressing and restoring a color table is well-known in the art." Therefore, the Examiner concludes that it would have been obvious to one skilled in the art "to modify Bhattacharjya to compress and restore a color table in order to conserve space in memory." However, Bhattacharjya fails to disclose a lookup table composed of characteristic points as claimed. Therefore, even if, *arguendo*, one skilled in the art were motivated to modify Bhattacharjya as suggested by the Examiner, the modification would still fail to render claim 13 unpatentable because the modification fails to disclose each and every claimed element.

Further, Applicants respectfully request the Examiner to withdraw the "Official Notice" taken against claim 13 and provide specific references in support of the rejection. It is respectfully submitted that the features recited in claim 13 is not well known as alleged by the Examiner. Applicant respectfully points the Examiner to MPEP 2144.03 regarding "Official Notice" which states:

It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are **not capable of instant and unquestionable**

demonstration as being well-known . . .

If applicant adequately traverses the examiner's assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained. See 37 CFR 1.104(c)(2). . .

If the examiner is relying on personal knowledge to support the finding of what is known in the art, the examiner must provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding. See 37 CFR 1.104(d)(2). . .

If applicant does not traverse the examiner's assertion of official notice or applicant's traverse is not adequate, the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant either failed to traverse the examiner's assertion of official notice or that the traverse was inadequate. If the traverse was inadequate, the examiner should include an explanation as to why it was inadequate.

Applicants respectfully submit that the Examiner did not follow any of the above-identified methodologies in finally rejecting claim 13.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 13 under 35 U.S.C. § 103.

CONCLUSION

In view of the above remarks, it is believed that claims 9-16 are allowable.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Ali M. Imam, Reg. No. 58,755 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.


Application No. 09/944,341
Amendment dated June 11, 2007
After Final Office Action of March 14, 2007

Docket No.: 0649-0799P

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

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